

**Chief Information Officer's Section
Office of the Governor
State of Utah**

Utah Technical Architecture: Impact Assessment

Standard/Policy Name: State of Utah Web Standards

Standard/Policy Number: 2000.10.13

PlanIT Project Number(s): Some specific projects but most are part of agency base IT infrastructure expenses.

Agencies Impacted: All state agencies.

Net New Costs to Agencies: Varies by agencies based principally upon the number of Web sites, the size of the sites and the current status of Web site accessibility and use of Meta tags on existing agency Web sites. InnerWeb applications will also need to conform with these standards as applications are developed and rewritten. The principal costs associated with this standard are in sections 2.1 Accessibility Standard and in section 3.7 Meta Tags. All other cost impacts appear to be minimal.

Assessment Date: January 10, 2001

Purpose of Standard:

The State of Utah Web Standard is designed to provide a common approach to Web site implementation by incorporating current best practices and to address information retrieval and disability access guidelines that have been identified as national best practices.

Business Driver Analysis:

The principal business drivers behind the revisions to the State of Utah Web Standard include the following:

- 1) Routine revision of existing Web standards to incorporate current trends and best practices for Web development.
- 2) Requirements of Section 508 §1194.22 and W3C Guideline recommendations for access to Web sites by disabled users, principally those with visual disabilities.
- 3) Provide better index access to State information using improved meta tags on agency Web sites.

Summary of Agency Web Sites Impacted:

A total of 95 agency Web sites with an indexed page count of 35,236 pages are impacted by the terms of this standard, principally in the areas of disability access and adding Meta tags to Web site pages. Each of these impacts will be analyzed separately.

Risk/Value Analysis: Many of the existing State Web personnel do not have adequate skills to implement all of the disability coding provisions so some outside contracting may be required. Based upon current rates this could increase the cost to an agency by as much as three to four times the estimated costs. Meta tagging could be facilitated with automated software solutions but agency Web employees would still require ongoing training in its use and application. The State Library could be a valuable resource in doing this on an ongoing basis. The biggest risk would appear to be availability of personnel on an agency and statewide basis to assist with implementation of sections 2.1 and 3.7. The value to the State of Utah appears to be high for both of these items but the risks of failure also appear to be significant concerns. The risks associated with doing nothing do not seem practical or acceptable.

Fiscal Impact Analysis (Section 2.1 Disability Access):

Costs are based on an assumed compliance level across the state of less than 20%. It is assumed that 80% of sites will require the equivalent of a complete site redesign and coding

effort. Time estimates are based upon 1 hour per site page at an estimated direct cost of \$28.00 per hour. This yields an estimated aggregate investment in excess of \$986,000. Some pages will take more or less than this amount of time. Ongoing disability access maintenance costs are estimated at an arbitrary 10% of year 1 costs, which yields an ongoing maintenance expense to agencies of approximately \$98,000 per year.

Estimated Disability Fiscal Impact by Agency:

Agency Name	Page Count	Year 1 Cost	Ongoing Est. Costs
ABC	74	2072	207
Agriculture	1751	49028	4902
Attorney General	590	16520	1652
CIO	253	7084	708
Commerce	873	24444	2444
Corrections	360	10080	1008
Courts	330	9240	924
DAS	6549	183372	18337
DCED	2268	63504	6350
DEQ	1303	36484	3648
DHRM	311	8708	870
DHS	1237	34636	3463
DNR	4194	117432	11743
DOH	3774	105672	10567
DPS	942	26376	2637
Fire Marshall	86	2408	240
Geological Survey	428	11984	1198
Governor's Office	1375	38500	3850
Highway Patrol	279	7812	781
Insurance	332	9296	929
Labor	200	5600	560
Legislature	2044	57232	5723
PSC	1151	32228	3222
Prosecution Council	46	1288	128
Safety Council	150	4200	420
State Auditor	386	10808	1080
Substance Abuse Council	143	4004	400
Tax Commission	1808	50624	5062
Transportation	1242	34776	3477
Treasurer	24	672	67
Trust Lands	36	1008	100
Work Force Services	697	19516	1951
TOTALS	35236	986608	98648

Fiscal Impact Analysis (Section 3.7 Meta Tags)

Costs are based on an assumed compliance level across the state of less than 10%. It is assumed that all sites add Meta tags to existing page inventories with an average time expenditure of 15 minutes per page at an estimated direct cost of \$28.00 per hour. Automated methods will impact this estimate favorably but only if the needed Meta tag information is readily available. In many cases some research will be required. No provision has been made to estimate the costs of placing Meta tags on dynamically generated Web pages that are included in many InnerWeb and agency Web sites. Ongoing maintenance costs are estimated at 20% of year 1 costs. This yields an overall year one cost impact to agencies in excess of \$246,000 and an ongoing maintenance cost of approximately \$49,000 per year.

Estimated Meta Tag Fiscal Impact by Agency:

Agency Name	Page Count	Year 1 Cost	Ongoing Est. Costs
ABC	74	518	103
Agriculture	1751	12257	2451
Attorney General	590	4130	826
CIO	253	1771	354
Commerce	873	6111	1222
Corrections	360	2520	504
Courts	330	2310	462
DAS	6549	45843	9168
DCED	2268	15876	3175
DEQ	1303	9121	1824
DHRM	311	2177	435
DHS	1237	8659	1731
DNR	4194	29358	5871
DOH	3774	26418	5283
DPS	942	6594	1318
Fire Marshall	86	602	120
Geological Survey	428	2996	599
Governor's Office	1375	9625	1925
Highway Patrol	279	1953	390
Insurance	332	2324	464
Labor	200	1400	280
Legislature	2044	14308	2861
PSC	1151	8057	1611
Prosecution Council	46	322	64
Safety Council	150	1050	210
State Auditor	386	2702	540
Substance Abuse Council	143	1001	200
Tax Commission	1808	12656	2531
Transportation	1242	8694	1738
Treasurer	24	168	33
Trust Lands	36	252	50
Work Force Services	697	4879	975
TOTALS	35236	246652	49318

Benefit Analysis:

Implementation of the provisions of this standard will result in more uniform development on agency Web sites, potentially improved accessibility to information on State Web sites for users with disabilities and improved access and retrieval to information and documents associated with agency Web sites. Disability access is a legal and public policy issue. Implementation of this standard would at minimum put the state in the position of trying to make information available to all citizens. An established state accessibility policy may reduce the legal exposure of the State to disabled groups that cannot get access to agency information on Web sites. Similar benefits would accrue to the State in terms of providing information access to disabled employees over the InnerWeb.

Training Requirements:

Approximately 158 known Webmasters and related Web personnel would need to be trained on Meta Tag application and disability access design. An unknown number of content contributors in agencies may also need similar training. Training would need to be ongoing to accommodate changes in agency Web personnel. Contractors that do Web design for the State would also require training and monitoring.

Migration and Implementation Timeline:

It is proposed that the disability provisions be implemented over the next several years as part of a systematic project for Web site redesign. Both eUtah and ITS may be able to assist agencies with disability design issues. Meta Tag implementation could begin as soon as adequate training has been identified for agencies. The roles of the State Library, ITS, and the CIO section need to be clearly established for these efforts to proceed on a cost effective basis.